ANIMAL WITH SURGICALLY MODIFIED GASTROINTESTINAL TRACT AND METHOD FOR STUDY OF WEIGHT REDUCTION

Abstract of the Invention

The invention comprises an animal having a presurgical substantially normal gastrointestinal tract, which gastrointestinal tract has been surgically modified such that postsurgically there is a reduction of the volume of the stomach of the gastrointestinal tract, a reduction in the digestive area of the gastrointestinal tract, a reduction in the co-mingling of food with gastric, biliary and pancreatic juices, a reduction in the presurgical gastric output of the peptide ghrelin, a reduction in the threshold for satiety, a permanent reduction in presurgical weight, and an induction of a condition of malabsorption. The surgically-altered animal may be adapted for use as an animal model in a method wherein the biological mechanisms underlying obesity and its reduction may be investigated; and, in which the molecular biological effects of surgical intervention for obesity may be investigated; and, in which the efficacy of noninvasive alternatives to surgical intervention for obesity may be investigated.